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ABSTRACT

The success of a new paradigm depends upon the level of coherency and organization within its supporting community, and Thomas Kuhn's argument concerning the resistance to new paradigms and their power to change the existing order can be used in the context of bilingual education. Bilingual education programs have the potential to create a scientific revolution in the field of education, have drawn a widespread resistance from existing paradigms, but have failed to instigate any paradigmatic changes in current educational practice. An examination of the various types of bilingual education programs currently functioning in American public schools raises the following questions: (1) Can bilingual education programs be characterized to the extent and level of technical knowledge that make them operational? (2) What are the effects of technological characteristics on the bilingual classroom structure and its outcomes? (3) Is it possible to structure bilingual education programs into "ideal type" models? Bilingual education has failed to arise as a paradigmatic response to a unique set of beliefs and has not developed a model that would generate hypotheses relevant to its survival in a bureaucratic environment. Bilingual education must gain control of itself and direct its own action. (Author/ML)

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IN SEARCH OF A PARADIGM FOR BILINGUAL EDUCATION

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In his analysis of the structure of scientific revolutions, Kuhn (1962) uses the term paradigm to serve as a mode for organizing the coherence of a scientific body of knowledge. Specifically, the term refers to "...accepted examples of actual scientific practice - examples which include law, theory, application, and instrumentation together - provide models from which spring particular coherent traditions of scientific research" (1962:10). In the accumulation of scientific knowledge, new paradigms emerge because old paradigms are unable to explain emerging puzzles or anomalies. The production of new scientific knowledge then becomes a cumulative process - paradigms replace each other within a continuous body of universal law.

An interesting feature of the concept "paradigm" is that its use is in close proximity to the phrase "scientific community". Implicit within Kuhn's analysis of the structure of scientific revolutions is the proposition that a paradigm wins over another because its advocates succeed in being more persuasive, and not necessarily because it is better (Holzner & Marx,1979). According to Kuhn (1977:460):"If the term 'paradigm' is to be successfully explicated, scientific communities must first be recognized as having an independent existence." As a result, not only are there competing paradigms, but also competing scientific communities. Thus, the success of a paradigm depends on the

level of coherency and organization within its supporting community.

For our purpose in this essay, the term paradigm is used in a general sense as a significant ordering principle or structuring idea that provides consistency and coherence in a body of knowledge. The specific body of knowledge we will be addressing is that which has acquired the label of "bilingual education". One of the initial assumptions in the introduction of bilingual education to the public schools was that its presence held the potential for a scientific revolution. However, the lack of a paradigm for bilingual education limited its chances of supporting this assumption. That is, and as we will attempt to demonstrate, bilingual education was not a paradigmatic response to a central body of ideas characterized by a distinct identity, or a specific community sharing and promoting that identity.

Bilingualism in Education

The introduction of bilingual education into the American public school environment was seen initially as a major challenge to prevailing educational practice. Its challenge rested primarily in its conceptualization as an educational technology necessary for growth in the public school. That this "growth" was primarily directed at language minority children quickly aroused the public to question its educational mission (Edwards,1980). Its presence after a turbulent decade of state,

local, and federal support is not a testament of its ability to withstand resistence, but to the institutional logic pervading public education - personal growth is neither a characteristic of nor a motivating factor for educational systems. The extent of resistence drawn by bilingual education has caused many observers to identify it symbolically with the Titanic.

Despite the fact that it is still not clear that education is a major determining factor in a person's future career and social class (Blau & Duncan,1967;Thurow,1972;Bowles & Gintis,1975), bilingual education was designed initially to serve as a vechicle for the provision of equal educational opportunity in the public schools to language minority children (Sugarman & Widess,1974;Foster,1976; Roos,1978). Perhaps the most significant feature in bilingual education was the assumption that by enhancing the language minority child's educational opportunity, a comparable level of alteration would occur in the child's quality of life. However, the conservative approach to change the public school adopts and its dedication to the rationalization of teaching as an activity, quickly resulted in the misuse of bilingual education for the enhancement of a language minority child's degree of social inequality. A review of the legal status of bilingual education, for instance, summarizes the issue as:"...the possible

invidious use of bilingual education to isolate, rather than to equalize minorities for segregation purposes, or its use simply to separate minorities for instructional purposes, may militate against the general acceptance of bilingual education as a meaningful statutory right of equal educational opportunity under Title VI" (Plastino,1979:435).

Adding to the confusion regarding the educational mission of bilingual education was the general fact that bilingual education was the creation of legislative bargaining. It came about without there being general agreement regarding a definition of bilingualism, and it was assumed that the Bilingual Education Act established an earnest interest in bilingualism (Roeming,1971). Troike (1978:1) depicts the situation as:"when the Bilingual Education Act (Title VII) was launched in 1968, it was...undertaken largely as an act of faith...(and)...there was virtually no research base upon which to build and service the needs of this great educational experiment." From its inception then, bilingual education was not so much a response to a need, but rather an attempt to structure a need that would serve to legitimate its presence. That it was also done as an act of faith within a highly bureaucratized environment severly limited its chances of surviving in an environment centered around purposive, rational action.

To facilitate its immersion into a delicate socio-political arena,

the "great educational experiment" was presented as a product of a social order sensitive to cultural pluralism, and a reflection of its national interest in bilingualism. The assertion that bilingual education was a reflection of the national interest aroused immediate concern in the general public domain, and mobilized the public schools to limit its program logic. Bilingual education was rapidly transformed such that it was conceptualized as a single and uniform phenomenon.

Since cultural pluralism was a principal basis for promoting bilingual education, its scope of application was also quickly reduced to language minority children (Fong,1978). The advocacy role language minority groups assumed regarding bilingual education, for example, was a principal means by which these groups interacted with the social order, but not vice-versa. As a result, it rapidly became apparent that while it might not be in the national interest to employ bilingual education as a means of enhancing the educational growth of language minority children, it was in the national interest to use bilingual education to monitor their educational growth.

The limited applicability of bilingual education, in turn, caused bilingual education rationales to be viewed as somewhat ethnocentric. The necessary setting was thus created for bilingual education opponents to argue that bilingual education was only justified in

terms of group autonomy, and not in the natural order of human rights for individuals to equal educational opportunity. As a socializing element in the public schools, bilingual education came to be portrayed as a mechanism for building protective ethnic enclaves in the schools. As a result, critics of bilingual education were quick to locate the bureaucratic support necessary for the creation of these enclaves (Thernstrom,1980:12):"The staffing of the Division of Bilingual Education by ethnic militants followed an administrative tradition: Government programs aimed at the particular group are often run by militant members of that group."

At this point, we can make the following observations from the preceding discussion. As a legislative creation, bilingual education was a response to a rapidly expanding social environment in which the educational inequality of language minority children was increasing in visibility. As such, bilingual education was not a paradigmatic response to a central body of ideas and a coherent tradition of scientific research. Though at the time of its emergence it drew support from a variety of academic disciplines interested in the study of bilingualism, it was not sufficient to evolve into a specific audience that would provide bilingual education with an independent existence. For example, the attempt to present these disciplines as

committed to bilingual education because of their interest in bilingualism had the immediate result of drawing the criticism that bilingual education research lacked an autonomous methodology.

Secondly, the concern with the promotion of bilingual education as a vechicle for equal educational opportunity in the public school for language minority children was instrumental in causing bilingual education rationales to be translated into terms of group autonomy. The most immediate result was that bilingual education was oversimplified to represent a single and uniform phenomenon, clearly identifiable and distinct from other forms of education (Lewis,1977). Its immersion into a system of mass public instruction in which few individual characteristics are taken into account, created numerous structural obstacles in its mission to serve the individual characteristics of language minority children. The manifest implication of this dilemma for everyday life was that hypotheses regarding the function of bilingual education produced two competing camps. On the one hand, there are those that hypothesize that bilingual education is necessary for the social accomodation of cultural pluralism, while on the other hand are those that see bilingual education as sufficient for the segmentation of ethnolinguistic groups within a superordinate framework of ethnic values.

Finally, as a legislative brainchild, bilingual education was an institutional response to another institution's needs. The increased visibility of the language minority child's educational inequality was reduced by incorporating it into an institutional context. Its institutional incorporation assured that it would be reflective of an institution's attempt to deal with an unstable social reality. As a result, the purpose of bilingual education was to deal with the social fact that language minority children were not part of the school's social reality because they were not full corporate members of the institution. Thus, the presentation of bilingual education as an institutional response to individual needs could only function satisfactorily if it neither reflected change nor personal growth. In the end, bilingual education was destined to be functional in the reproduction of an institutional social reality, and not for personal growth.

Making Sense

In their encounters with the real world, individuals carry in their heads a model of society that allows them to make sense of these encounters. This model facilitates making sense by influencing what the individual looks for and what is to be done with the observations. For instance, this process of encounter with the real world is

summarized by Boulding (1981:94) as:"...it still remains true that at any moment each human individual is surrounded by a real world of which the structures in his brain are a part, and which is affected by these structures in processes that are themselves part of the real world."

In a sense then, individuals hold a general conception of social phenomena they most often come in contact with, some mental picture of how these phenomena come together and work. In the construction of life experiences for the individual, this general conception of social phenomena then allows for the generation of interpretations regarding "new", or frequently encountered phenomena. In this manner, the individual's construction of social reality retains a level of coherency. For our purposes in the following discussion, the term model is used to refer to the general image of the main outline for some major phenomenon, including certain ideas about the nature of the units involved and the pattern of their relations.

As the preceding discussion has already pointed out, bilingual education was primarily designed to deal with the increasing level of educational inequality experienced by the language minority child in the public schools. As a general social fact, the increasing level of inequality took the shape of a major social phenomenon because of

its constraining effect on everyday life. In other words, the presence of inequality made sense. However, the failure of bilingual education to be a paradigmatic response to a body of ideas prevented it from assuming a "general image" that would seriously question the assumptions within an educational system rooted upon unequal relationships. Instead, the search for a "general image" took the pragmatic route of developing competing definitions. These definitions were not developed as an attempt to see which one most closely reflected the general outline of the phenomenon, instead they became a search for substance. It may be that given the makeshift development of bilingual education, it was expected that the definition for the phenomenon with which most people would identify, would become the shared general image of the phenomenon.

The general expectation that a search for a definition of bilingual education would produce some statement regarding its general nature quickly ran into difficulty. For example, employing a limited view of the phenomenon, Saville & Troike (1971:1) defined bilingual education as "...an educational program in which two languages are mediums of instruction." In contrast, the U.S. Office of Education produced what it regarded as a <u>useable</u> definition of bilingual education (Andersson & Boyer,1970:49):"Bilingual education is instruction in two languages and the use of those two languages as mediums of instruction for any part

of or all of the school curriculum." These are probably the most often cited definitions, or examples, of bilingual education, and they typify what is included in almost all other definitions of bilingual education - the use of two languages in and for instruction.

The lack of specificity, however, in definitions for bilingual education regarding the interactive processes of bilingualism in education, resulted in the development of a continuum for bilingual education programs:

a. programs where all classroom instruction is in the second language with the exception of a component in mother tongue skills;

b. programs in which both languages are used in an equal manner for instruction;

c. programs in which classroom instruction is in the mother tongue and the target language is taught as a subject.

An interesting background variable at this stage in the presentation of bilingual educatior as a continuum was the ensuing debate between those advocates of <u>assimilation</u> and those advocating for <u>pluralism</u>. As a result, the preceding continuum took on an ideological form by acquiring the labels of: a. Transfer, b. Enrichment, and c. Maintenance.

Had there been greater cohesion among bilingual education proponents at the time, this ideological debate would have served an instrumental purpose by legitimating its presence. Instead, this debate became instrumental in depicting a state of confusion within bilingual education. That is, the debate demystified the nature of bilingual education.

While the search for definition did permit the development of images for bilingual education, it was still far from the actual need of making sense of bilingual education. On a global dimension, the transition from definition to program development predicated that variation between programs would primarily be found in the arrangement and combination of components. In practice, differences between bilingual education programs were to be found in the arrangement of elements comprising the program's educational technology.

The most serious implication in the transition from definition to program development was that program growth came to be interpreted as additive, with the goal being to oversee the total number of units thrown together because they conform to a common definition. By comparison, program growth is not cumulative in that units, as a series of increments, each prepares the way for the next. Given an institutional environment and its own demand on constituent units, the latter is much more likely to alter patterns, whereas the former

is functional in pattern maintenance. It is almost as if programs were expected to define themselves and the phenomenon they were designed to address.

Technology

In regard to the continuum for bilingual education programs discussed in the preceding pages, one can list the following educational technology variables in the application of bilingual education teaching methods (Paulston,1980:7-14;Ramirez,1980;Cummins,1980;Matute-Bianchi, 1980;Paz,1980).

1. The sequencing of language. For example, Title VII programs teach initial reading simultaneously in either the two languages or in the mother tongue first, whereas the Canadian early immersion programs typically reverse the process and teach initial reading in the second language.

2. Time alloted for each language, both in sequencing and within the curriculum. Title VII programs, for example, do not delay more than one year in introducing reading in the second language (if not taught simultaneously).

3. The relative emphasis on the mother tongue. In curriculum design this is accomplished by including a bicultural dimension to supplement the bilingual goals.

4. Teacher ethnicity and competency. Variation in this variable occurs in that the teacher may be a member of the same ethnic group as the children, the same teacher may use both languages in instruction, or the two languages may be represented by a certified teacher on the one hand and by a teacher's aide on the other.

5. The language of the surrounding community and its impact on the bilingual program in the school is a variable that is poorly dealt with. It is readily assumed that the staffing of bilingual programs with paraprofessionals from the local community will provide the necessary continuity between home and the school.

While many more educational technology variables can be found to distinguish between bilingual education programs, the preceding ones are those most frequently encountered in the literature on bilingual education, and those asserted to be most influential in determining bilingual education results.

These variables, however, are rarely operationalized within a coherent framework. As a result, they do not provide for an empirically based feature analysis of bilingual education models. Studies of bilingual education program effectiveness, for example, are not of potential benefit to program development because the lack of consistency in the presentation of educational technology variables prevents the

interpretation of results within the scope limitations of what is being studied. In a frequently cited review of the issues in bilingual education program effectiveness, Zappert & Cruz (1977) list the following as limitations in the structured comparison of bilingual education programs:

a. No control for student's socioeconomic background.

b. No measure of the student's initial language dominance.

c. No specification of teacher qualifications, and teaching materials.

After their lengthy review, Zappert & Cruz (1977:39) conclude that: "...the research demonstrates that bilingual education and bilingualism improves, or does not impede, oral language development, reading and writing abilities, mathematics and social studies improvement, cognitive functioning, and self image. In addition, there is empirical evidence that bilingual education programs improve school attendance."

A careful look at the variables mentioned above, and those listed by Zappert & Cruz (1977), reveals that they are background characteristics of teachers and/or students, rather than structural features of bilingual programs. This makes sense if what one is searching for an approximation of what bilingual education programs consist of, and not how their functioning capability is affected by technology variables. What is possible to conclude from studies that review bilingual education

characteristics is that they fall short of making meaningful contributions to the field because their findings cannot be employed to separate bilingual education programs that do work from those that do not work. As a result, the preceding conclusion reached by Zappert & Cruz is an actual reflection of the state of the art for bilingual education - all programs, whether effective or ineffective, are acceptible because they are bilingual to some degree.

The main reason for undertaking comparative studies is for the discovery of general laws, or principles. Following our early comments regarding Kuhn's notion of paradigm , comparative studies are necessary for the explication of a model from which will spring a coherent body of ideas. The formulation of these ideas within a coherent framework will, in turn, be helpful in predicting program success, or in diagnosing program weaknesses. Given the development of general principles from a main body of ideas, together with a detailed knowledge of the importance of relevant variables and their behavior, greater reason for confidence in making decisions is available. As we have seen, the lack of concept and data comparability in bilingual education programs limits structured comparison, and prevents the generation of general principles.

General Observations

For all practical purposes, the attention invested in the initial search for a definition of bilingual education was both a snare and a delusion. A snare in the sense that definitions took the form of rules for a game in which the players needed order. The delusion was created that in order to function properly bilingual education must be set off from general education. The irony is that the initial basis for developing bilingual education was that it was going to augment the language minority child's chances of succeeding in a body of general education. The aim was certainly not to isolate the phenomenon, bilingualism, and study its development independent of a general body of education. As a result, inequality was enhanced and not altered.

The transition from definition to program development was neither based on a consistent body of data nor on a body of general principles. The lack of specificity in the elements constituting bilingual education, was responsible for not developing confidence in making decisions that would outline the parameters of a general model for bilingual education. For example, one result of this was the development of a continuum for bilingual education programs that was based on a comparison of bilingual relationships - those that exist between the individual and the system

of education, and those that exist between groups and the total system of education. Consequently, any program with some hint of bilingualism was incorporated into the general body of bilingual education.

Secondly, in this transition, educational technology variables became a principal means for evaluating bilingual programs. However, the lack of consistency in the presentation of these variables, the failure to account for their interactions within a conceptual framework, did not permit for the analysis of program possibilities. For example, the focus is on the study of a large number of bilingual education programs because it is assumed that they are derivatives of an ideal type blueprint, rather than on an examination of how educational technology variables cluster into different programs. The latter, given the relative level of indeterminacy between variables, has the greatest potential for explicating parameters that are reflective of a general model or necessary as guides for model building.

Interpretations

Two issues have been emphasized in this essay as fundamental for the development of a paradigm for bilingual education. First of all, it is necessary that a model and a methodology limited in scope by the nature of the phenomenon addressed be developed. The initial dependence

of bilingual education on contributions from academic disciplines doing research in bilingualism forced it to adopt the assumptions of those disciplines and to work according to the models they had developed. That is, the emphasis was to see what could be borrowed from what was already around in the hope that it would make sense for bilingual education. Consequently, a set of beliefs unique to bilingual education did not develop.

Secondly, the failure to develop a unique set of beliefs prevented the development of a consensus regarding an acceptable frame of reference and a terminology for its expression. As a result, crises in bilingual education centered around the lack of consistency in research findings, and its failure to cluster educational technology variables around what made sense and what did not in an attempt to facilitate decision-making. The primary obstacle against decision-making in bilingual education then became the assertion that as long as they addressed a minimal level of bilingualism they were providing a service to the general body of education. At this point, the service to children becomes secondary. For example, because bilingual education was a response by one institution to the needs of another, its utility was evaluated in terms of its contribution to, and reflective of, the institutional environment, rather than in how it interacted with the

constituent units of the environment.

In addition, the failure to develop a model for bilingual education was not supportive of a holistic approach to bilingual education. Instead, the notion that was developed and supported was that bilingual education was the aggregation of things similar in nature. This emphasis on similarity was largely a result of the initial attempt to borrow from other academic disciplines what was assumed would make sense for bilingual education. A latent consequence of this was that similarity became differentiated by academic discipline, and concern was placed on the specialization of knowledge from each academic discipline. As a result, the constituent elements for bilingual education differentiated between and among themselves, and reinforced this by assuming specialized functions. Thus, bilingual education was not conceptualized as a system of education, but rather as a type of education definable only in terms of the function its components assumed.

The conceptualization of bilingual education as a system of education would have forced it to initially abandon the notion that its development was dependent on the sum of its parts. This notion was functional for the maintenance of a stable institutional social reality. By contrast, as a system of education, bilingual education

would have become highly competitive in an institutional environment directed at experiencing change and finding a net purpose for it. Change was, of course, the essence of the reality bilingual education was addressing. For example, bilingual education decided to take as its point of departure from general education by emphasizing differences, rather than pursue these differences by placing them in a system of education capable of competing within a highly institutional, and increasingly bureaucratic, environment. In a classic study of the Renaissance as an educational achievement, Durkheim (1969) argues that in order for people to feel the need to change their educational system, they must become conscious of ideas and needs that have emerged for which the old system of education is no longer adequate. Following Durkheim's observation, it was never really clear what bilingual education as addressing, which ideas it was addressing that the old system was not, or whether it was responding to specific needs. As such, bilingual education neither reflected nor manipulated change.

Summary

We have attempted to suggest in this essay what may have been initial points in the rise of bilingual education that prevented the development of a paradigm. The failure of bilingual education to arise as a paradigmatic response to a unique set of beliefs, prevented the

development of a model that would generate hypotheses relevant to its survival within a bureaucratic environment. Thus, a framework within which rules for describing relationships between bilingual education variables was not developed, and as a result, validation for programs became unmanageable and ad hoc.

Given its dependence on surrounding academic disciplines, perhaps the most serious limitation in bilingual education was its failure to develop its own unique character. In the world of everyday existence, academic disciplines function as institutional actors who increase their own chances of survival by the level of attraction they draw from other institutional actors, and their ability to employ this attraction to create a dependent relationship in which they are the superordinate party. A prerequisite then in a search for a paradigm is that bilingual education must ground itself in what it is and commit itself to it. In simple terms, it must gain control of itself, and direct its own action. Regarding the larger institutional context it must compete within, bilingual education and its supporters must heed the advice offered by Machiavelli in The Discourses: "He who establishes a dictatorship and does not kill Brutus, or he who founds a republic and does not kill the sons of Brutus, will only reign for a short time."

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